

In the Specification:

At page 2-3, lines 24-30 and 1-3 respectively, please amend the paragraph at line 29:

Various approaches have been investigated to address the adverse effects of such multi-user interference. In CDMA-based systems, a combination of user specific signature sequences, multi-user processing at the receiver and spatial processing is used to separate the signals from the different users. Ideally, the objective of the rate allocation is to maximize the achievable rate of each user given the transmit power constraints. However, because user signals interfere with one another, a change in the data rate of one user causes a change in power allocation for all users, and hence it is not possible to simultaneously maximize the rate of every user. Consequently, realizing an ideal system, one that properly allocates transmission rates to each of the users while attempting to maximize the system throughput, has been challenging.

At pages 7-8, lines 28-30 and 1-10 respectively, please amend the paragraph at line 6:

Consistent with the above-described approach, FIG. 1 shows such a communication system 100 having multiple user terminals 110, 112, *etc.* competing for simultaneous use of a shared-frequency channel 120 in order to access at least one remotely-located terminal 130. The skilled artisan would appreciate that different applications require different system types. In an OFDM-type application, according to the present invention, each of the multiple user terminals 110, 112 of the system 100 are DSL-type modems, channel 120 includes pairs of twisted-pair telephone lines, and terminal 130 is an intelligent modem adapted to interface with a central station/switch (or CO) 140. In a CDMA[[]]-type application, ~~example~~ communication system 100 is implemented as a CDMA-type cellular communication system with each of the multiple user terminals 110, 112 being cellular-telephones, channel 120 as a wireless CDMA channel, and terminal 130 as a cellular base station adapted to interface with the system's cellular central station/switch 140.